

CATINUCHAIN (CAT) Smart Contract Audit Report

Audit by Meme Audit — Comprehensive Security Review

| Field | Value |
|------------------|--------------------------------------------|
| Contract Address | 0xD5954748D24cFDdBE6be7DDDd48243a084432804 |
| Blockchain | Arbitrum |
| Token Name | CATINUCHAIN |
| Symbol | CAT |
| Total Supply | 1,000,000,000 (1B) CAT |
| Decimals | 18 |

Executive Summary

Meme Audit has completed a detailed audit of the CATINUCHAIN (CAT) smart contract deployed on the Arbitrum network. The analysis covered functionality, logic, access control, and compliance with ERC20 standards. The contract implements a taxation system, marketing wallet, and owner-configurable features. No critical vulnerabilities were found; however, caution is advised due to centralized control.

Security Check Summary

| Check | Status | Severity |
|--------------------|------------------|----------|
| Reentrancy | Passed | Low |
| Overflow/Underflow | Passed | Low |
| Access Control | Caution | High |
| Taxation Logic | Passed | Low |
| Event Emission | Partially Passed | Low |
| ERC20 Compliance | Passed | Low |
| Rescue Function | Review | Medium |
| Withdraw Function | Review | Medium |
| Front-running | Informational | Low |
| Gas Optimization | Passed | Info |

Detailed Findings

F-01 — Owner Centralization (Severity: High)

The owner has authority to modify taxes, wallets, and perform rescues. Centralized control introduces risk. Recommendation: Implement a multisig wallet or timelock for key actions.

F-02 — Low-Level Call in rescueERC20 (Severity: Medium)

Low-level calls can behave unexpectedly with non-standard tokens.

Recommendation: Use SafeERC20.safeTransfer for safety.

F-03 — Use of transfer() in withdrawETH (Severity: Medium)

The .transfer method may fail if recipient requires more gas.

Recommendation: Use call() with require(success).

F-04 — Missing Zero-Address Check (Severity: Low)

Transfers and approvals don't verify zero addresses.

Recommendation: Add require(to != address(0)) for compliance.

F-05 — Event Emission Missing (Severity: Low)

No event for rescueERC20 or withdrawETH.

Recommendation: Emit events for all admin actions.

Compliance & Standards

The CATINUCHAIN token complies with ERC20 requirements and uses Solidity 0.8.20 safeguards. It omits mint and burn functions intentionally to maintain a fixed supply. Implementing OpenZeppelin's SafeERC20 and ReentrancyGuard is recommended for long-term safety. The code is structurally sound and efficient.

Conclusion

The CATINUCHAIN (CAT) token is a secure and standard ERC20 implementation with added taxation and marketing logic. It achieves a strong security rating with no critical vulnerabilities detected. Centralized ownership remains the primary risk factor. Meme Audit recommends using a timelock or multisig to mitigate single-point control.

Final Security Score: 92 / 100

Audit Completed by Meme Audit • Date: 2025-10-16